#### AIR QUALITY PERMIT

Issued To: Riverside Contracting, Inc. Permit #3046-01

5571 Alloy South

Complete Application Received: 04/28/06 Missoula, MT 59808-8413 Preliminary Determination Issued: 05/19/06

Department's Decision Issued: 06/06/06

Permit Final: 06/22/06

AFS #777-3046

An air quality permit, with conditions, is hereby granted to Riverside Contracting, Inc. (Riverside), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.740, et seq., as amended, for the following:

## Section I: Permitted Facilities

#### Α. Plant Location

Riverside operates a portable drum mix asphalt plant and associated equipment. Permit #3046-00 applies while operating at any location in Montana, except within those areas having a Department of Environmental Quality (Department)-approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) nonattainment areas. A Missoula County air quality permit will be required for locations within Missoula County, Montana. Riverside will be required to obtain an addendum to this air quality permit to operate at locations in or within 10 km of certain PM<sub>10</sub> nonattainment areas. A list of permitted equipment is included in Section I.A of the Permit Analysis.

#### B. **Current Permit Action**

On April 28, 2006, the Department received a complete permit application from Riverside requesting a modification to Permit #3046-00 to replace the existing asphalt drum mix burner with a burner capable of burning a combination of propane, fuel oil, natural gas, and coal fuels. Additionally, the application requested to add a coal mill to the facility. Permit #3046-01 was also updated to reflect the current permit language and rule references used by the Department.

# Section II: Conditions and Limitations

#### **Emission Limitations** A.

- Asphalt plant particulate matter emissions shall be limited to 0.04 grains per dry 1. standard cubic feet (gr/dscf) (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart I).
- 2. Riverside shall not cause or authorize to be discharged into the atmosphere from the asphalt plant, stack emissions that exhibit 20% opacity or greater averaged over six consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart I).
- 3. Riverside shall not cause or authorize to be discharged into the atmosphere from systems for screening, handling, storing, and weighing hot aggregate; systems for loading, transferring, and storing mineral filler; systems for mixing hot mix

- asphalt; and the loading, transfer, and storage systems associated with emission control systems, any visible emissions that exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart I).
- 4. Riverside shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308 and ARM 17.8.752).
- 5. Riverside shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.4. (ARM 17.8.752).
- 6. Riverside shall install, operate, and maintain the baghouse on the asphalt plant drum, as well as the fabric filter on the lime silo (ARM 17.8.752).
- 7. A device to measure the pressure drop (magnehelic gauge, manometer, etc.), on the baghouse must be installed and maintained. Pressure drop must be measured in inches of water. Temperature indicators at the baghouse inlet and outlet must be installed and maintained (ARM 17.8.752).
- 8. Once a stack test is performed, the asphalt production rate shall be limited to the average production rate during the last source test demonstrating compliance (ARM 17.8.749).
- 9. Riverside shall only use fuel oil and/or propane as fuels for the asphalt heater (ARM 17.8.749).
- 10. Riverside shall use fuel oil, coal, natural gas, and/or propane to fire the hot mix dryer (ARM 17.8.749).
- 11. Riverside shall not burn more than 6,030 tons of coal in the asphalt drum dryer during any rolling 12-month time period (ARM 17.8.749).
- 12. The sulfur content of any coal burned by Riverside shall not exceed 0.44% by weight (ARM 17.8.752).
- 13. Total asphalt plant production shall not exceed 670,000 tons during any rolling 12-month time period (ARM 17.8.749).
- 14. Riverside shall not operate more than one diesel generator at any given time and the maximum rated design capacity shall not exceed 1,000 kilowatts (kW) and shall not exceed 1,340 hours during any rolling 12-month time period (ARM 17.8.749).
- 15. If the permitted equipment is used in conjunction with any other equipment owned or operated by Riverside, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period. Any calculation used to establish production levels shall be approved by the Department (ARM 17.8.749).

16. Riverside shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR Part 60, Subpart I, as it applies to this asphalt operation (ARM 17.8.340 and 40 CFR 60, Subpart I).

#### B. Testing Requirements

- 1. Methods 1-5 and 9 source test shall be performed on the asphalt plant within 180 days of the initial start up date of the asphalt plant. After the initial source test, additional testing shall continue on an every 4-year basis, or according to another testing/monitoring schedule as may be approved by the Department, in order to demonstrate compliance with Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.105 and ARM 17.8.749).
- 2. Pressure drop on the control device and temperature must be recorded daily and kept on site according to Section II.C.2 (ARM 17.8.749).
- 3. Pressure drop on the baghouse and temperatures must be recorded during the compliance source test and reported as part of the test results (ARM 17.8.749).
- 4. Riverside may retest at any time in order to test at a higher production rate (ARM 17.8.749).
- 5. Since asphalt production will be limited to the average production rate during the compliance source test, it is suggested the test be performed at the highest production rate practical (ARM 17.8.749).
- 6. All compliance source tests must be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- 7. The Department may require further testing (ARM 17.8.105).

# C. Operational Reporting Requirements

- 1. If this asphalt plant is moved to another location, an Intent to Transfer Form must be sent to the Department. In addition, a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area where the transfer is to be made, at least 15 days prior to the move. The Intent to Transfer Form and the proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department upon request (ARM 17.8.765).
- 2. Riverside shall maintain on-site records showing daily hours of operation, daily production rates, and daily pressure drop and temperature readings for the last 12 months. The records compiled in accordance with this permit shall be maintained by Riverside as a permanent business record for at least five years following the date of the measurement, must be available at the plant for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).
- 3. Riverside shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in Section I.A of the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

- 4. Riverside shall document, by month, the total amount of coal burned in the asphalt drum dryer. By the 25<sup>th</sup> day of each month, Riverside shall calculate the amount of coal burned during the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.11. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 5. Riverside shall obtain written coal analyses from each coal supplier to verify compliance with the percent sulfur content limitation in Section II.A.12 (ARM 17.8.749).
- 6. Riverside shall document, by month, the asphalt production from the facility. By the 25<sup>th</sup> day of each month, Riverside shall calculate the asphalt production from the facility for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.12. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 7. Riverside shall document, by month, the hours of operation of the diesel generator. By the 25<sup>th</sup> day of each month, Riverside shall calculate the hours of operation of the diesel generator for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.14. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 8. Riverside shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. This notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745 (1)(d) (ARM 17.8.745).

#### D. Notification Requirements

1. Within 15 days after actual startup of the asphalt plant, Riverside shall notify the Department of the date of actual startup (ARM 17.8.749).

#### Section III: General Conditions

A. Inspection - Riverside shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

- B. Waiver The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Riverside fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Riverside of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement, as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fee Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Riverside may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Construction Commencement Construction must begin within three years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. Riverside shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas having a Department-approved permitting program.

# PERMIT ANALYSIS Riverside Contracting, Inc. Permit #3046-01

# I. Introduction/Process Description

# A. Permitted Equipment

Riverside Contracting, Inc. (Riverside) owns and operates a portable 2002 Gencore Ultra Drum asphalt plant (500 tons per hour), a 1,000 kilowatt (kW) diesel generator, a coal mill, and associated equipment. Air emissions from the asphalt drum are controlled by a high efficiency baghouse.

# B. Source Description

For a typical operational set-up, stockpiled aggregate is loaded into the cold feeder. The aggregate is dispensed from the bins, and dumped onto feeder conveyors that transfer the aggregate to the drum mix dryer. The aggregate travels through the rotating drum where asphalt oil and lime is added to the dryer. The dryer drum mixes the asphalt oil, lime, and the aggregate. The resulting hot-mix asphalt is loaded into a hot mix asphalt storage silo where it is stored until the asphalt is dumped into trucks for transport to the project site.

# C. Permit History

On May 19, 1999, Riverside was issued **Permit #3046-00** and **Addendum 1** to operate a portable Drum Mix Asphalt Plant and associated equipment. The facility was originally permitted to operate in the SW ¼ of Section 14, Township 20 North, Range 3 West, in Cascade County, Montana. In addition, Addendum 1 allowed summer month operations (April 1, 1999, through September 30, 1999) in the following locations in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) nonattainment areas: Libby, Kalispell, Whitefish, Columbia Falls, Thompson Falls, and Butte. **Addendum 1** expired on September 30, 1999.

# D. Current Permit Action

On April 28, 2006, the Department of Environmental Quality (Department) received a complete permit application from Riverside requesting a modification to Permit #3046-00 to replace the existing asphalt drum mix burner with a burner capable of burning a combination of propane, fuel oil, natural gas, and coal fuels. Additionally, the application requested to add a coal mill to the facility. Permit #3046-01 was also updated to reflect the current permit language and rule references used by the Department. **Permit #3046-01** replaces Permit #3046-00.

#### E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT) determinations, air quality impacts and environmental assessments, is included in the initial analysis associated with each change to the permit.

# II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

- A. ARM 17.8, Subchapter 1 General Provisions, including, but not limited to:
  - 1. <u>ARM 17.8.101 Definitions</u>. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
  - 2. <u>ARM 17.8.105 Testing Requirements</u>. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
  - 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Riverside shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

- 4. <u>ARM 17.8.110 Malfunctions</u>. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation, or to continue for a period greater than four hours.
- 5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.
- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to:
  - 1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
  - 2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
  - 3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
  - 4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
  - 5. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>

- Riverside must maintain compliance with the applicable ambient air quality standards. C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
  - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over six consecutive minutes.
  - 2. <u>ARM 17.8.308 Particulate Matter, Airborne.</u> (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Riverside shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
  - 3. <u>ARM 17.8.309 Particulate Matter, Fuel Burning Equipment</u>. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.
  - 4. <u>ARM 17.8.310 Particulate Matter, Industrial Process</u>. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
  - 5. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
  - 6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
  - 7. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). This facility is an NSPS-affected facility under 40 CFR Part 60, Subpart I (Standards of Performance for Hot Mix Asphalt Facilities), because the facility was constructed after June 11, 1973. Therefore, the facility is subject to the requirements of 40 CFR Part 60, Subpart I.
- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
  - 1. <u>ARM 17.8.504 Air Quality Permit Application Fees</u>. This rule requires that Riverside submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Riverside submitted the appropriate permit application fee for the current permit action.
  - 2. <u>ARM 17.8.505 Air Quality Operation Fees.</u> An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. This air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the

previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

- E. ARM 17.8, Subchapter 7 Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:
  - 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
  - 2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter, or use any asphalt plant, crusher or screen that has the Potential to Emit (PTE) greater than 15 tons per year of any pollutant. Riverside has a PTE greater than 15 tons per year of particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>), sulfur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), and carbon monoxide (CO); therefore, an air quality permit is required.
  - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
  - 4. <u>ARM 17.8.745 Montana Air Quality Permit--Exclusion for De Minimis Changes</u>. This rule identifies the de minimis changes at permitted facilities that are not subject to the Montana Air Quality Permit Program.
  - 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application
    Requirements. This rule requires that a permit application be submitted prior to installation, alteration or use of a source. A permit application was submitted for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Riverside submitted an affidavit of publication of public notice for the February 22, 2006, issue of the *Phillips County News*, a newspaper of general circulation in the city of Malta in Phillips County, as proof of compliance with the public notice requirements.
  - 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
  - 7. <u>ARM 17.8.752 Emission Control Requirements</u>. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required

- BACT analysis is included in Section III of this permit analysis.
- 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving Riverside of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.
- 10. <u>ARM 17.8.759 Review of Permit Applications</u>. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
- 11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than one year after the permit is issued.
- 12. <u>ARM 17.8.763 Revocation of Permit</u>. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
- ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
- 14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of Intent to Transfer location, the facility will operate in the new location for less than one year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. ARM 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:
  - 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in

this subchapter.

2. ARM 17.8.818 Review of Major Stationary Sources and Major Modification—Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source since it is not a listed source and the facility's PTE is less than 250 tons per year (excluding fugitive emissions) of any air pollutant.

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
  - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
    - a. PTE > 100 tons/year of any pollutant;
    - b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
    - c. PTE > 70 tons/year of  $PM_{10}$  in a serious  $PM_{10}$  nonattainment area.
  - 2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #3046-01 for Riverside, the following conclusions were made:
    - a. The facility's PTE is less than 100 tons/year for any criteria pollutant.
    - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
    - c. This source is not located in a serious PM<sub>10</sub> nonattainment area.
    - d. This facility is subject to a current NSPS (40 CFR Part 60, Subpart I) standards.
    - e. This facility is not subject to any current NESHAP standards.
    - f. This source is not a Title IV affected source nor a solid waste combustion unit.
    - g. This source is not an EPA designated Title V source.

Based on these facts, the Department has determined that Riverside will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Riverside will be required to obtain a Title V Operating Permit.

#### III. BACT Determination

A BACT determination is required for each new or altered source. Riverside shall install on the new or altered source the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized.

Riverside proposed to control particulate emissions from the hot mix asphalt plant with a baghouse. All visible emissions from the asphalt plant including systems for handling, storing, and weighing hot aggregate, systems for loading, transferring, and storing mineral filler, systems for mixing hot mix asphalt, and the loading, transfer, and storage systems associated with emission control systems are limited to 20% opacity. In addition, all asphalt particulate emissions are limited to 0.04 grains per dry standard cubic foot (gr/dscf). Further, Riverside must take reasonable precautions to limit the fugitive emissions of airborne particulate matter on haul roads, access roads, parking lots, and the general plant area. Reasonable precautions include treating all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to meet the fugitive dust opacity requirements. The Department determined that using and properly maintaining a baghouse to maintain compliance with the corresponding limitations in Section I.A of the permit and using water and chemical dust suppressant to comply with the reasonable precautions limitation will constitute BACT for the Riverside asphalt plant.

Because of the limited amount of emissions produced by the diesel generator/engine and the lack of readily available/cost effective add-on controls, add-on controls would be cost prohibitive. Therefore, the Department determined that proper operation and maintenance with no additional controls would constitute BACT for the diesel generator/engine.

The control options required for the proposed asphalt facility and for the diesel generator/engine that would be used to power the facility are similar to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

#### IV. Emission Inventory

	Tons/Year					
Source	PM	$PM_{10}$	$NO_x$	VOC	CO	$SO_x$
2002 Gencore Ultra Drum Asphalt Plant with Baghouse	18.38	9.19				
Coal Fired Calculations (90% Coal)			72.36	0.12	1.51	46.43
Gas Fired Calculations (10% Natural Gas)			1.01	1.34	16.75	0.11
Elevator, Screens, Bins, and Mixer	12.56	10.05				
Coal Handling	16.75	13.40				
Cold Aggregate Handling	16.75	13.40				
Asphalt Heater (propane)			0.07		0.01	0.21
Diesel Generator (up to 1,000 kW)	0.63	0.63	21.56	0.58	4.94	1.81
Coal Mill	0.30	0.15				
Lime Silo with Filter Vent	3.35	1.34				
Haul Roads	2.74	1.23				
Total	71.46	49.39	95.00	2.04	23.21	48.57

• A complete emission inventory for Permit #3046-01 is on file with the Department. The Department established hourly limits for the asphalt plant to keep PM<sub>10</sub> emissions under the modeling threshold of 50 tons per year.

# V. Existing Air Quality

Permit #3046-01 is issued for the operation of a portable drum mix asphalt plant at any location within Montana, excluding those areas that have a Department-approved permitting program, those areas considered tribal lands, or those areas in or within 10 kilometers (km) of certain  $PM_{10}$  nonattainment areas. In the view of the Department, the amount of controlled emissions generated by this facility will not exceed any set ambient standard. In addition, this source is portable and will operate on an intermittent and temporary basis at any given location so any air quality impacts will be minimal.

# VI. Air Quality Impacts

Permit #3046-01 will cover the operations of this portable drum mix asphalt plant while operating in those areas within Montana, classified as being in attainment with federal ambient air quality standards, and those areas still undefined (not yet classified). Based on the information provided, the amount of controlled emissions generated by this facility will not exceed any set ambient air quality standard for operations in these areas. This facility is a portable source that will operate on an intermittent and temporary basis at a given location, so any impacts to air quality will be minor and short-lived.

#### VII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 2-10-105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

# VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act (MEPA), was completed for this project. A copy is attached.

Analysis Prepared By: Eric Thunstrom

Date: May 3, 2006

# DEPARTMENT OF ENVIRONMENTAL QUALITY

Permitting and Compliance Division Air Resources Management Bureau 1520 East Sixth Avenue P.O. Box 200901 Helena, Montana 59620-0901 (406) 444-3490

#### FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued For: Riverside Contracting, Inc.

Permit Number: #3046-01

Preliminary Determination Issued: 05/19/06 Department Decision Issued: 06/06/06

Permit Final: 06/22/06

- 1. Legal Description of Site: Riverside operates a portable drum mix asphalt plant and associated equipment. Permit #3046-01 applies while operating at any location in Montana, except within those areas having a Department-approved permitting program, those areas considered tribal lands, or those areas in or within 10 km of certain PM<sub>10</sub> nonattainment areas. A Missoula County air quality permit will be required for locations within Missoula County, Montana. Riverside will be required to obtain an addendum to this air quality permit to operate at locations in or within 10 km of certain PM<sub>10</sub> nonattainment areas.
- 2. Description of Project: On April 28, 2006, the Department received a complete permit application from Riverside requesting a modification to Permit #3046-00 to replace the existing asphalt drum mix burner with a burner capable of burning a combination of propane, fuel oil, natural gas, and coal fuels. Additionally, the application requested to add a coal mill to the facility.
- 3. *Objectives of Project*: The object of the project would be to produce business and revenue for the company by the sale and use of asphalt. The issuance of Permit #3046-01 would continue to allow Riverside to operate the permitted equipment at various locations throughout Montana.
- 4. Additional Project Site Information: In many cases, the drum mix asphalt plant operation may move to a general site location, or open cut pit, which has been previously permitted through the Industrial and Energy Minerals Bureau (IEMB). If this were the case, a more extensive EA for the site would have been conducted and would be found in the Mined Land Reclamation Permit for that specific site.
- 5. Alternatives Considered: In addition to the proposed action, the Department considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Riverside demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.
- 6. A Listing of Mitigation, Stipulations, and Other Controls: A listing of the enforceable permit conditions and a permit analysis, including a BACT analysis, would be contained in Permit #3046-01.

- 7. Regulatory Effects on Private Property Rights: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and to demonstrate compliance with those requirements and would not unduly restrict private property rights.
- 8. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The "no action alternative" was discussed previously.

		Major	Moderate	Minor	None	Unknow n	Comments Included
A.	Terrestrial and Aquatic Life and Habitats			X			yes
B.	Water Quality, Quantity, and Distribution			X			yes
C.	Geology and Soil Quality, Stability, and Moisture			X			yes
D.	Vegetation Cover, Quantity, and Quality			X			yes
E.	Aesthetics			X			yes
F.	Air Quality			X			yes
G.	Unique Endangered, Fragile, or Limited Environmental Resource			X			yes
Н.	Demands on Environmental Resource of Water, Air, and Energy			X			yes
I	Historical and Archaeological Sites				X		yes
J.	Cumulative and Secondary Impacts			X			yes

**Summary of Comments on Potential Physical and Biological Effects:** The following comments have been prepared by the Department.

#### A. Terrestrial and Aquatic Life and Habitats

Terrestrials would use the same area as the asphalt plant operation. Impacts on terrestrial and aquatic life could result from storm water runoff and pollutant deposition, but such impacts would be minor, because the asphalt plant operation is an existing operation, would be considered a minor source of emissions, and would have intermittent and seasonal operations. Furthermore, the air emissions would have only minor effects on terrestrial and aquatic life because facility emissions would be well dispersed in the area of operations (see Section 8.F of this EA). Therefore, only minor and temporary effects to terrestrial and aquatic life and habitat would be expected from the existing asphalt operation.

# B. Water Quality, Quantity, and Distribution

Water would be required for dust suppression on the surrounding roadways and areas of operation and for pollution control for equipment operations. Water use would cause only minor, if any, impacts to water resources in these areas because the facility has readily available water resources and would be far enough away from those resources that any pollutant deposition would be dispersed before reaching the surface water resources. The facility would only require a relatively small amount of water for pollution control and would only have minor amounts of pollutant deposition (see Section 8.F of this EA). Therefore, at most, only minor surface and groundwater quality impacts would be expected.

# C. Geology and Soil Quality, Stability, and Moisture

The existing asphalt plant operation would have only minor impacts on geology and soil quality, stability, and moisture because deposition of air pollutants on soils would be minor (see Section 8.F of this EA), only minor amounts of water would be required to be used for pollution control, and only minor amounts of pollution would be generated. In addition, the pollutants would be widely dispersed before settling upon vegetation and surrounding soils (see Section 8.D of this EA). Therefore, any effects upon geology and soil quality, stability, and moisture at this proposed operational site would be minor.

# D. Vegetation Cover, Quantity, and Quality

Minor impacts would occur on vegetative cover, quality, and quantity because this is an existing facility and would be operating on an intermittent and temporary basis. Pollutants would be greatly dispersed and corresponding deposition on vegetation from the proposed project would be minor (see Section 8.F of this EA). Also, water would be used for pollution control, as necessary.

#### E. Aesthetics

The asphalt plant operation would be visible and would create additional noise while operating at the site. However, Permit #3046-01 would include conditions to control emissions, including visible emissions, from the plant. Since the asphalt plant operation is an existing source, would be portable, and would operate on an intermittent and seasonal basis, any visual aesthetic impacts would be minor and short-lived.

#### F. Air Quality

Air quality impacts from the proposed project would be minor because this is an existing facility, would operate on an intermittent and temporary basis, and would originally locate at a previously disturbed site. Permit #3046-01 would include conditions limiting the facility's opacity and the facility's asphalt plant operation. Permit #3046-01 would also require water and water spray bars be available on site and used to control emissions. Permit #3046-01 would also limit total emissions from the asphalt plant operation and any additional Riverside equipment operated at the site to 250 tons/year or less, excluding fugitive emissions.

Further, the Department determined that the asphalt plant operation would be a minor source of emissions as defined under the Title V Operating Permit Program because the source's PTE was limited below the major source threshold level of 100 tons per year for any regulated pollutant. Pollutant deposition from the facility would be minimal because the pollutants emitted would be widely dispersed (from factors such as wind speed and wind direction) and would have minimal deposition on the surrounding area (due to site topography of the area and minimal vegetative cover in the area). Therefore, air quality impacts from operating the existing asphalt plant operation in this area would be minor.

#### G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources previously contacted the Montana Natural Heritage Program (MNHP). Search results concluded there were no known environmental resources of special concern within the area.

## H. Demands on Environmental Resources of Water, Air, and Energy

This is an existing asphalt plant and due to the relatively small size of the facility, would only require small quantities of water, air, and energy for proper operation. Only small quantities of water would be required for dust suppression of emissions being generated at the site. In addition, impacts to air resources would be minor because the source is a minor industrial source of emissions, with intermittent and seasonal operations, and because air pollutants generated by the facility would be widely dispersed (see Section 8.F of this EA). Energy requirements would be provided by a diesel generator. Overall, any impacts to water, air, and energy resources would be minor.

# I. Historical and Archaeological Sites

The Department previously contacted the Montana Historical Society - State Historical Preservation Office (SHPO) in an effort to identify any historical and/or archaeological sites that may be present in the proposed area of construction/operation. Search results concluded that there are no previously recorded historical or archaeological resources of concern within the area proposed for initial operations. According to past correspondence from the Montana State Historic Preservation Office, there would be a low likelihood of adverse disturbance to any known archaeological or historic site given previous industrial disturbance to an area. Therefore, no impacts upon historical or archaeological sites would be expected as a result of operating the proposed asphalt plant operation.

# J. Cumulative and Secondary Impacts

The asphalt plant operation would cause minor cumulative and secondary impacts to the physical and biological aspects of the human environment because the facility is an existing source and would be limited in the amount of PM, PM<sub>10</sub>, NO<sub>x</sub>, VOC, CO, and SO<sub>x</sub> emissions to be generated. Emissions and noise generated from the equipment would, at most, result in only minor impacts to the area of operations because it would be seasonal and temporary in nature. Additionally, this facility, in combination with other emissions from equipment operations would not be permitted to exceed 250 tons per year of non-fugitive emissions. Overall, cumulative and secondary impacts to the physical and biological aspects of the human environment would be minor.

9. The following table summarizes the potential economic and social effects of the proposed project on the human environment. The "no action alternative" was discussed previously.

		Major	Moderate	Minor	None	Unknow n	Comments Included
A.	Social Structures and Mores				X		yes
B.	Cultural Uniqueness and Diversity				X		yes
C.	Local and State Tax Base and Tax Revenue			X			yes
D	Agricultural or Industrial Production			X			yes
E.	Human Health			X			yes
F.	Access to and Quality of Recreational and Wilderness Activities			X			yes
G	Quantity and Distribution of Employment				X		yes
Н.	Distribution of Population				X		yes
I.	Demands for Government Services			X			yes
J.	Industrial and Commercial Activity			X			yes
K.	Locally Adopted Environmental Plans and Goals			X		_	yes
L.	Cumulative and Secondary Impacts			X		_	yes

# **SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS**: The following comments have been prepared by the Department.

#### A. Social Structures and Mores

The asphalt plant operation would cause no disruption to the social structures and mores in the area because the source is an existing source, would be a minor industrial source of emissions, and would only have temporary and intermittent operations. Further, the facility would be required to operate according to the conditions that would be placed in Permit #3046-01, which would limit the effects to social structures and mores.

#### B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of this area would not be impacted by the existing asphalt plant operation because the facility would be a portable source, with seasonal and intermittent operations. The predominant use of the surrounding area is rural and would not change as a result of this asphalt plant operation. Therefore, the cultural uniqueness and diversity of the area would not be affected.

#### C. Local and State Tax Base and Tax Revenue

The asphalt plant operation would have little, if any, impact on the local and state tax base and tax revenue because the facility is an existing facility, would be a minor industrial source of emissions, and would have seasonal and intermittent operations. Thus, only minor impacts to the local and state tax base and revenue could be expected from the employees and facility production. Furthermore, the impacts to local tax base and revenue would be minor because the source would be portable and the money generated for taxes would be widespread.

# D. Agricultural or Industrial Production

The asphalt plant operation would have only a minor impact on local industrial production since the facility is an existing facility and would be a minor source of asphalt production and air emissions. Also, the facility would generally locate in a rural area. Therefore, because minimal deposition of air pollutants would occur on the surrounding land (see Section 8.F of this EA), only minor and temporary effects on the surrounding vegetation (i.e. agricultural production) would occur. In addition, the facility operations would be temporary in nature and would be permitted with operational conditions and limitations that would minimize impacts upon surrounding vegetation (see Section 8.D of this EA).

#### E. Human Health

Permit #3046-01 would incorporate conditions to ensure that the asphalt plant operation would be operated in compliance with all applicable air quality rules and standards. These rules and standards are designed to be protective of human health. As described in Section 8.F. of this EA, the air emissions from this facility would be minimized by the use of water spray and other process limits that would be required by Permit #3046-01. Also, the facility is an existing facility and would be operating on a temporary basis and pollutants would be dispersed (see Section 8.F of this EA). Therefore, only minor impacts would be expected on human health from the asphalt plant operation.

# F. Access to and Quality of Recreational and Wilderness Activities

This facility would have little affect on Access to and Quality of Recreational and Wilderness Activities because the facility would usually operate on private property used for similar activities that has little recreational or wilderness value. Also, the facility would operate on a seasonal and intermittent basis on private land and would be a relatively minor industrial source of emissions. Therefore, any changes in the quality of recreational and wilderness activities created by operating the equipment at this site would be expected to be minor and intermittent.

# G. Quantity and Distribution of Employment

The existing asphalt plant operation would require no new employees to operate and would have seasonal and intermittent operations. No individuals would be expected to permanently relocate to this area of operation as a result of operating the asphalt plant operation. Therefore, no effects upon the quantity and distribution of employment in this area would be expected.

# H. Distribution of Population

The existing portable asphalt plant operation is a portable industrial facility that would require the existing employees to operate. No individuals would be expected to permanently relocate to this area of operation as a result of operating the asphalt plant operation. Therefore, the asphalt plant operation would not impact the normal population distribution in the initial area of operation or any future operating site.

#### I. Demands of Government Services

Minor increases would be seen in traffic on existing roadways in the area while the asphalt plant operation is in progress. In addition, government services would be required for acquiring the appropriate permits for the proposed project and to verify compliance with the permits that would

be issued. Demands for government services would be minor.

# J. Industrial and Commercial Activity

The asphalt plant operation would represent only a minor increase in the industrial activity in the proposed area of operation because this source is a relatively small industrial source that would be portable and temporary in nature. No additional industrial or commercial activity would be expected as a result of the proposed operation.

# K. Locally Adopted Environmental Plans and Goals

Riverside would be allowed, by Permit 3046-01, to operate in areas designated by EPA as attainment or unclassified for ambient air quality. Permit #3046-01 would contain limits for protecting air quality and to keep facility emissions in compliance with any applicable ambient air quality standards, as a locally adopted environmental plan or goal for operating at this proposed site. Because the facility is an existing portable source and would have intermittent and seasonal operations, any impacts from the facility would be minor and short-lived.

#### L. Cumulative and Secondary Impacts

The asphalt plant operation would cause minor cumulative and secondary impacts to the social and economic aspects of the human environment in the immediate area of operation because the source is an existing source and would be a portable and temporary source. Further, no other industrial operations are expected to result from the permitting of this facility. Minor increases in traffic would have minor effects on local traffic in the immediate area. Because the source is relatively small and temporary, only minor economic impacts to the local economy would be expected from operating the facility. Further, this facility may be operated in conjunction with other equipment owned and operated by Riverside, but any cumulative impacts upon the social and economic aspects of the human environment would be minor and short-lived. Thus, only minor and temporary cumulative effects would result to the local economy.

Recommendation: An EIS is not required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: All potential effects resulting from construction and operation of the proposed facility are minor; therefore, an EIS is not required.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Department of Environmental Quality - Permitting and Compliance Division (Industrial and Energy Minerals Bureau); Montana Natural Heritage Program; and the State Historic Preservation Office (Montana Historical Society).

Individuals or groups contributing to this EA: Montana Department of Environmental Quality (Air Resources Management Bureau and Industrial and Energy Minerals Bureau), Montana State Historic Preservation Office (Montana Historical Society).

EA prepared by: Eric Thunstrom

Date: May 3, 2006